Metals & Mining

Nationalisation – Killing The Goose That Lays The Golden Eggs

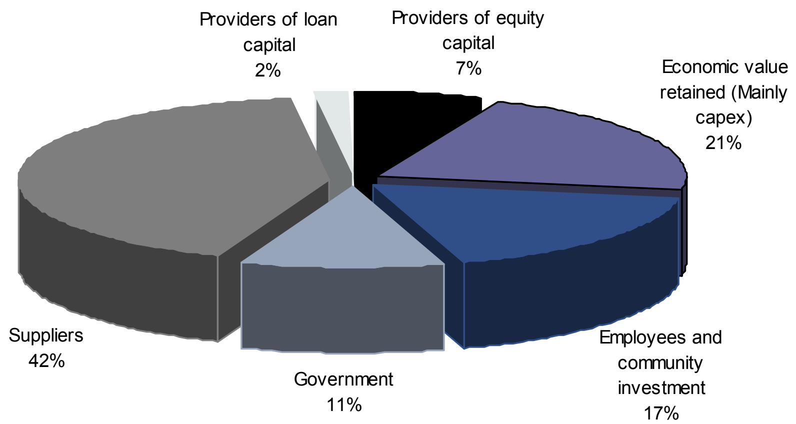
- **Nationalisation not the best option** — ANC Youth League president Julius Malema says nationalisation is the only solution to South Africa's economic imbalances. Numbers and facts suggest otherwise. Potential near-term social benefits from nationalisation are significantly outweighed by value destruction, according to our calculations. Nationalisation has had a poor track record and we believe establishing an investment-friendly political environment may increase value for all stake holders.

- **A big debate over a small piece of pie** — We calculate only 7% of value generated by SA miners gets distributed to shareholders. The biggest beneficiaries of value generated by South African mining are employees (18% of value generated), the government (11%) and suppliers to the mining industry (41%). The issue is that a fight over a small slice of value could lead to value destruction for all stakeholders. South Africa risks losing foreign capital necessary to achieve growth, in our view.

- **South Africa losing out on the boom** — South Africa is already an unattractive investment destination, partly due to concerns around security of tenure. It has the world's largest in-situ value resource base worth over $2.5trn. However, we believe a limited number of greenfield projects relative to other mining countries indicate under-investment. Resources alone provide only value generation potential. To generate value for all, mining projects require substantial upfront capital investment, infrastructure and scarce skills.

- **Nationalisation unlikely** — Given the potential negative impact on the entire SA economy, and protection by the SA constitution, we view the nationalisation of mines as highly unlikely. Higher taxes would be the lesser of two evils, in our view, but are also likely to discourage foreign investment given South Africa's relative unattractiveness as evidenced by current underinvestment.

Figure 1. Economic value distributed per stakeholder ($49bn)*



*Note: For globally diversified miners: South African value generated only.
Source: Company Reports and CIRA Estimates

- Industry Overview

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Our Stance on Nationalisation of SA mines

In this report we analyse and discuss the following four aspects:

- The beneficiaries of value generated by South African mining;
- Nationalisation's track record in other countries;
- South Africa's inability to fully benefit from its mineral wealth; and
- Potential upside risk to South African mining taxes.

Three key conclusions from this note are as follows:

- The biggest beneficiaries of South African mining are employees, the government and suppliers to the mining industry. Shareholders get only 7% of value generated.
- In most countries where nationalisation of mines occurred, it does not point to economic benefits. Rather, especially when poorly planned, it often coincides with subdued GDP performance, low investment and failure to reduce poverty.
- South Africa is already an unattractive investment destination for miners, as evidenced by relative underinvestment. Nationalisation or even higher taxes will just worsen the situation in our view. Government should focus on infrastructure spend and creating an investment-friendly political environment. This should attract foreign capital and scarce mining skills necessary to unlock South Africa's mining potential.

Given the importance to South Africa's mining industry to the economy and the clear disadvantages of nationalization in most other countries, we believe nationalisation is not an option in South Africa. We highlight the risk that continuing nationalization rhetoric may weigh on miners' share prices, until government silences the ANC Youth League. However we are comfortable to maintain Buy recommendations on selected stocks, based on solid fundamentals and attractive valuations. Our preferred stocks are African Rainbow Minerals, Anglo American and Assore.

Who could get hurt?

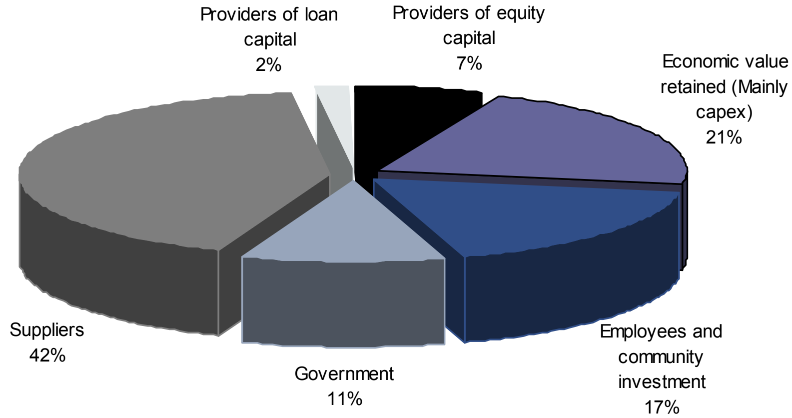
Employees, suppliers and the government are the biggest beneficiaries of mining

The biggest beneficiaries of South African mining are employees (18% of value generated), the government (11%) and suppliers to the mining industry (41%). It is no wonder that unions oppose nationalisation. We calculated benefits to different stakeholders in the mining industry by aggregating South African mining companies' Direct Economic Value Generated and Distributed statements.

The scrap over a small piece can lead to the entire pie disappearing.

Mining companies generated and distributed R360bn (US$49bn) in value in South Africa in 2010 (Figure 3). Providers of equity capital shared in only 7% of the benefit. The issue is that a fight over 7% of the value generated could effectively lead to value destruction (the pie shrinking) for all stakeholders.

Figure 2. Economic value distributed per stakeholder ($49bn)*



* Note: For globally diversified miners: South African value generated only.

Source: Company Reports and CIRA Estimates

Figure 3. Mining companies' economic value distributed per stakeholder (South African portion only)

Share code	Employees and community investment	Government	Suppliers	Providers of loan capital	Providers of equity capital	Economic value retained (Mainly capex)	Total economic value distributed
ANG	3,932	419	6,517	473	191	4,942	16,473
GFI	4,076	1,585	2,818	271	601	8,282	17,632
HAR	3,975	777	4,177	99	198	1,367	10,593
AMS	10,942	1,866	23,385	312	1,764	7,468	45,737
IMP	3,497	2,986	9,153	255	1,536	3,185	20,612
NHM	886	463	1,967	0	216	414	3,945
LON	4,974	268	3,524	67	0	1,976	10,810
AQP	261	177	1,761	149	0	525	2,872
RBP	808	172	450	13	0	677	2,119
AGL	17,435	14,692	53,107	2,913	3,824	24,371	116,342
BHP	3,672	5,031	16,283	362	3,371	10,125	38,845
ARI	1,491	1,009	5,624	192	533	2,428	11,277
ASR	924	823	3,863	124	407	945	7,086
EXX	3,691	391	9,140	356	961	2,151	16,690
KIO	2,280	7,211	10,200	428	10,659	7,923	38,700
Total	**62,842**	**37,869**	**151,969**	**6,011**	**24,261**	**76,780**	**359,732**

Source: Company Reports and CIRA Estimates

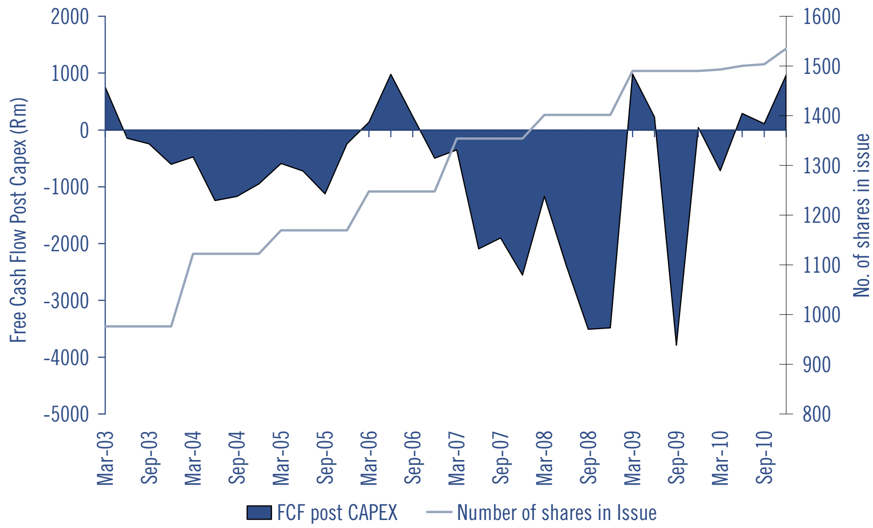
Gold miners an extreme example

Gold companies shareholders' cash funds South African workers

Gold miners are generating substantial value in South Africa. Despite this, providers of equity capital have not shared in meaningful cashflow returns since 2003. Figure 4 shows how the sector burned shareholders' cash almost sustainably over the period. Revenue generated was distributed mainly to employees and suppliers and the cash shortfall after capex was effectively funded by new capital from equity providers (rights issues). In some cases capital was imported from foreign investors to pay the South African gold mining workforce.

If these mines were government owned over this period, the South African tax payer would have had to fund the shortfall.

Figure 4. SA gold miners' free cash flow and number of shares in issue

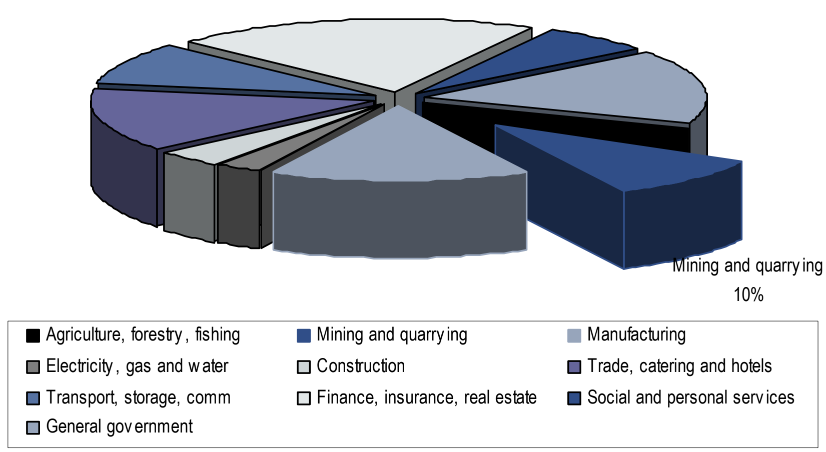


Source: Company Reports and CIRA Estimates

Other sectors are dependent on mining

Although mining contributes only 10% to South Africa's GDP in nominal terms, other sectors are highly dependent on a successful mining sector. 41% of miners' value generated is paid to suppliers, representing contract labour, equipment suppliers, construction, Eskom and other economic factions. Value distributed to employees are used to stimulate trade, services etc. Some economic regions, especially rural areas where poverty is traditionally the highest, are dependent on the mining industry for development (in Limpopo, Mpumalanga for instance).

Figure 5. Contribution to South Africa's 2010 nominal GDP ($330bn)



Source: EcoWin

A potential flight of capital and skills to more attractive mining regions would likely have a negative impact on the competitiveness of the South African mining industry, which could shrink value generation potential, with a negative impact on all sectors of the economy.

Such a development would be even more challenging in a country like SA where fixed capital spending has traditionally been low compared to, for example, developing Asia. In 2010, fixed investment was only 20% of GDP, less than the 25% ratio commonly deemed by economists as a pre-condition to an acceleration in GDP growth to 6% a year (as per the government's long-term goal). A flight of skills could also have a sharply negative impact on SA's cost structure and industry bottlenecks at a time when the skills shortage is already a major issue. In early 2011, more than 50% of manufacturers surveyed reported a shortage of skilled labour.

Mining nationalisation's track record

Experience of nationalisation of the mining sector in most countries where it has occurred over the past few decades does not point to economic benefits. Rather, especially when poorly planned, it often coincides with subdued GDP performance, low investment and failure to reduce poverty.

The performance of the manufacturing sector also appeared subdued, countering claims (made by the ANC Youth League in particular) that state ownership of mines would encourage local beneficiation and boost downstream industries.

The examples we look at below are taken from emerging economies, where common themes underlying the nationalisation model appear to have been:

- Insufficient public-sector skills in managing complex operations;
- Lack of financial resources to fund necessary capital investment; and
- poor governance, which at worst resulted in "asset stripping" to enrich a politically-connected minority.

Democratic Republic of the Congo

In 1967, President Mobutu Sese Seko nationalised the Union Minière du Haut-Katanga, which at the time accounted for about half of the government's revenues and 70% of FX receipts. This was followed by broader nationalisation of other sectors of the economy in 1975.

However, the economy failed to develop:

- GDP per capita contracted on average by 2.6% a year in the 1970s and 1.2% in the 1980s, before the civil war of the 1990s accelerated the collapse.
- From 1968 to 1990, fixed investment only averaged a lowly 12% of GDP.
- Export earnings failed to show a meaningful increase from the 1970s to the 1980s.

It has since been privatised, with continued government participation. A pick-up in activity has been slow despite high copper prices, mainly due to dilapidated infrastructure and corruption issues.

Zambia

By 1970, the Zambian government had acquired majority control in local mining operations, but poor subsequent performance of the mining sector – coupled with a trend decline in world copper prices – led to a prolonged period of economic stagnation.

- GDP per capita declined by nearly 2% on average a year in 1970-90;
- fixed investment fell from around 30% of GDP in the early 1970s to less than 10% in the late 1980s;
- export earnings (in constant US dollars) fell sharply over the period. The Zambian minister of mines recently pointed out that copper production had tumbled from 750,000 tonnes a year in the 1970s to about 200,000 just before privatisation started.
- It was only after the privatisation of the Zambian Consolidated Copper Mines (ZCCM) by the Chiluba government in the 1990s that trend growth and investment picked up significantly.

Ghana

Nationalised 55% of mining companies in 1972. The 1970s-1980s was a very difficult period for Ghana: according to World Bank statistics, GDP peaked at US$2.88 billion (constant 2000 prices) in 1974 and after a long period of decline, that level was only matched again in 1988.

While other factors were partly responsible for the decline (military coups, hyper-inflation, poor fiscal management) it also appears that the state was unable to leverage ownership of the mining sector.

Bolivia

On1 May 2006 President Evo Morales announced plans to nationalise the natural gas industry. Royalties were increased significantly and the national oil company was given exclusive rights for commercialisation of hydrocarbon products. There is no evidence of any negative macroeconomic impact from the measures, though it may reflect the environment of booming commodity prices which significantly boosted Bolivia's terms of trade and thus spurred economic growth.

We also note that Bolivian authorities managed the revenue windfall relatively prudently and left the door open to private participation in resource investments.

Venezuela

In May 2007, Venezuela stripped oil companies of operational control over Orinoco Belt crude projects, as part of President Hugo Chavez's nationalisation drive.

While the Venezuelan economy has recovered in 2010 on the back of stronger global demand and higher oil prices, its performance remains subdued compared to its Latin American neighbours (less than 4% GDP growth expected this year), structural bottlenecks have not been addressed and elevated inflation remains a problem. Net FDI flows have been negative for the past four years.

Zimbabwe

The country has not nationalised mines, but has had significant security of tenure issues.

In June 1998, the Zimbabwe government published its "policy framework" on the Land Reform and Resettlement Programme Phase II (LRRP II), which envisaged the compulsory purchase over five years of 50,000 square kilometres from the 112,000 square kilometres owned by white commercial farmers, public corporations, churches, non-governmental organisations and multinational companies. The programme was eventually implemented in chaotic fashion in 2000 when state-sponsored, often-violent "land invasions" chased commercial farmers away from their land and displaced thousands of farm workers.

Agricultural production collapsed, business sentiment plunged, companies divested – resulting in a halving of real GDP over a decade, substantial capital and skilled labour flight, sky-high unemployment and a collapse of the domestic health and education system.

At present, continued uncertainty about property rights remains one of the major obstacles to any strong economic recovery.

South Africa not capitalising on its inheritance

Resources only provide value generation potential… scarce capital and skills are required to unlock

South Africa has the world's largest in-situ value resource base with an estimated $2.5trn of value in the ground. However, having the resources only provides value generation potential. To generate value for all, mining projects require substantial upfront capital investment and scarce skills.

Figure 6. Resource base by country

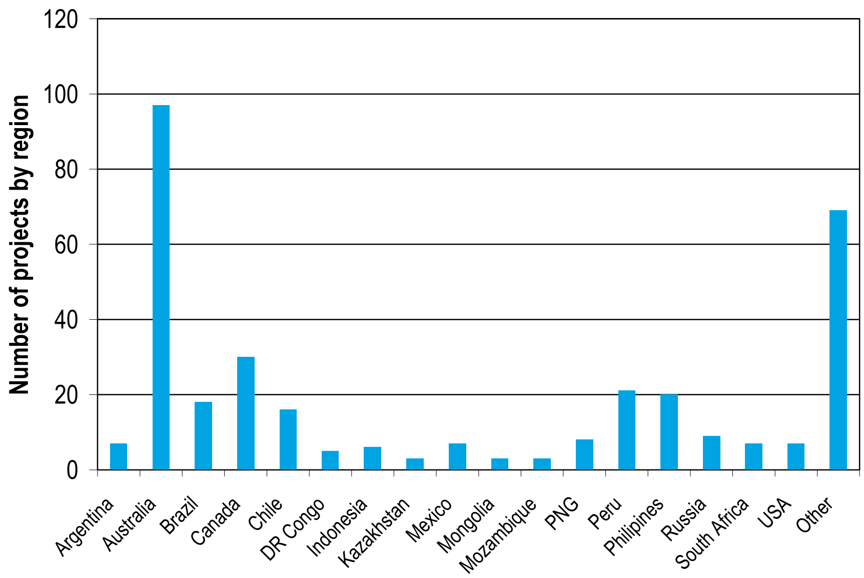
Country	Value of resources - ex energy (US$bn)	Country	Value of resources - ex energy (US$bn)
South Africa	2494	India	296
Russia	1636	Kazakhstan	292
Australia	1588	Mexico	240
Canada	1000	Indonesia	227
Brazil	726	Guinea	222
China	717	Germany	128
Chile	661	Poland	127
USA	613	Sweden	125
Ukraine	516	New Caledonia	99
Peru	328	DRC	75

Source: USGS and Citi Investment Research and Analysis

South Africa seems to be under-investing in commodities growth

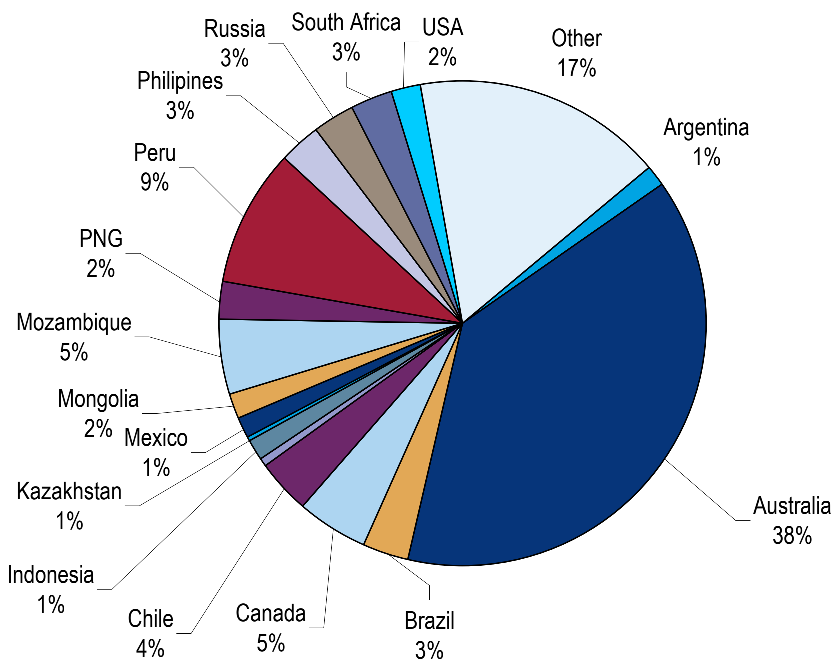
On 20 June 2011 we published "Generation Next", in which we analyse greenfield mining projects globally. We concluded that Russia, Australia, Canada and Brazil all have large resource bases which are being turned into large scale potential greenfield growth. However, South Africa's large reserve base and limited number of greenfield projects (translating into low levels of production growth) indicate a country that seems to be relatively under-investing in commodities growth.

Figure 7. Number of greenfield projects by region



Source: Company data, Brook Hunt and Citi Investment Research and Analysis

Figure 8. Volume addition by region (Cu equivalent)



Source: Company data, Brook Hunt and Citi Investment Research and Analysis

The table below provides a ratio (value of wealth divided by project growth) to indicate countries that are relatively over or under investing in growth. The higher number indicates a low rate of greenfield growth versus reserves. So essentially South Africa, Russia and Kazakhstan all have low expected production growth rates in relation to their resource base. Australia, Peru, DRC and Indonesia all display higher levels of production growth when compared to reserves.

Figure 9. Production growth to resource ratio

Country	Ratio
South Africa	2.74
Russia	1.83
Kazakhstan	1.71
USA	0.92
Brazil	0.68
Canada	0.65
Mexico	0.62
Chile	0.54
Indonesia	0.53
DR Congo	0.38
Australia	0.12
Peru	0.11

Source: Citi Investment Research and Analysis

Why does SA not attract new capital?

1. Lack of infrastructure investment limits growth

South Africa could be missing out on the commodity boom

Unlike countries like Australia, it appears South Africa has underinvested in new rail, port and electricity infrastructure. As a result miners with very large coal (Exxaro) or manganese (African Rainbow Minerals) reserves for example cannot expand to reflect their potential in line with global peers. In many cases South African miners are looking for investment opportunities abroad to keep growing. South Africa is rapidly losing market share and potentially missing out on the commodities boom fuelled by rapid growth in emerging markets.

A lack of rail infrastructure also increases freight costs for bulk producers which are forced to use road transport instead. This, in turn, is causing damage to roads, repairs to which taxpayers have to fund.

A lack of infrastructure development limits value creation for all, in our view.

2. Shortages pose inflation risk (potentially above industry average)

Many shortages

Apart from the lack of infrastructure development, South Africa faces skills, electricity, and water shortages which affect current production, growth potential and mining inflation.

The country faces electricity tariff increases of 25% per year over the next two years, based on latest announcements, to bring it closer in line with what other countries are paying and ensuring long-term financial viability of both public and private investments in new generation projects. Skills shortages are contributing to above-inflation (double-digit) wage increases in several job categories.

Above-average mining inflation in South Africa is eroding miners' global competitiveness.

3. The nationalisation debate and security of tenure issues

Asset nationalisation is a risk in any country with large income inequality and a historically skewed ownership distribution of natural resources (e.g. mineral wealth). In South Africa, the issue is complicated by the political and economic legacy of apartheid, under which the black majority was largely barred from ownership in the mining sector.

Mixed messages and unfortunate events

Mixed messages from within the ANC around nationalisation and unfortunate events like the Kumba Iron Ore/ICT/AMSA dispute over Sishen's mine's mining rights raise a perceived risk of doing business in South Africa.

Miners are likely to be prepared to pay significantly higher taxes (in countries like Australia) for better perceived security of tenure and superior infrastructure.

Higher taxes the lesser of two evils

Australia's case study

Australia is a case study of potential damage from unexpected changes in fiscal policy. On 2 May 2010, the Australian government released proposals for the introduction of a Resource Super Profits Tax (RSPT) on the resources sector, without consulting with the mining industry. Miners were outraged at the proposals which effectively meant an additional 40% tax of operating profit (less a small allowance). RSPT was in addition to existing corporate tax and would increase the mining industry's headline tax rate including royalties from about 41% to 57% – the highest in the world for the minerals sector.

Major mining companies expressed themselves strongly against RSPT, some threatening to halt investment plans. In June last year, Xstrata shelved spending on two Queensland projects expected to cost a combined $6.6 billion and employ 3250 workers in reaction to the RSPT proposals.

RSPT was a blow for Australia's Prime Minister

The spat over RSTP became so heated that it likely contributed to the demise of Australia's Prime Minister, Mr Kevin Rudd on 24 June 2010. Ms Julia Gillard, who replaced Rudd, immediately called for a change to the contentious resources tax, in consultation with the mining industry.

On 2 July 2010 RSPT proposals were effectively replaced by a less penalising MRRT, which is at a lower rate of 30%, allows a 25% extraction allowance, and applies to iron ore and coal assets only.

Upside risk to tax in South Africa?

South African miners started paying mining royalties in March 2010, in line with global best practice and market expectations.

Figure 10 below shows total taxes that mining companies pay in different countries (including royalties). South African miners pay around 36% of EBIT in taxes (excluding STC), which is below rates in the USA (42%), Australia (43%) and Brazil (41%).

Higher taxes could mean more value generation for all stakeholders.

Higher taxes are the lesser of to two evils, in our view, but could also discourage foreign investment given South Africa's relative unattractiveness as evidenced by current underinvestment. However, given that SA's taxes are slightly lower than other mining regions, there could be upside risk. Increased taxes could benefit all stakeholders provided that the majority of incremental taxes are reinvested in infrastructure to create a more competitive platform for miners. This could assist miners to grow in line with South Africa's mineral wealth potential.

Figure 10. Comparison of total tax burdens globally

	Russia	Australia - excl MRRT	Chile	USA	Brazil	China	Peru	South Africa	Canada
Revenue ($)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Royalty ($)	5.5	5.2	5.0	3.2	3.1	3.1	3.0	3.5	2.0
Cost ($)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
EBITDA ($)	44.5	44.8	45.0	46.8	46.9	46.9	47.0	46.5	48.0
D&A ($)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
EBIT ($)	40.5	40.8	41.0	42.8	42.9	42.9	43.0	42.5	44.0
Tax ($)	8.1	12.2	8.2	15.0	14.6	10.7	12.9	11.9	13.6
Profit ($)	32.4	28.6	34.0	27.8	28.3	32.2	31.4	30.6	35.2
Total tax ($)	13.6	17.4	13.2	18.2	17.7	13.8	15.9	15.4	15.6
Total tax - % of EBIT	**34%**	**43%**	**32%**	**42%**	**41%**	**32%**	**37%**	**36%**	**36%**
Average royalty	5.5%	5.2%	5.0%	3.2%	3.1%	3.1%	3.0%	3.5%	2.0%
Corporate tax rate	20%	30%	20%	35%	34%	25%	30%	28%	18%
Provincial tax rate	0%	0%	0%	0%	0%	0%	0%	0%	13%

Source: USGS, Ernst & Young and Citi Investment Research and Analysis

Investment stance and ranking the miners

Commodities and mining equities have been under pressure due to US growth concerns, the end of QE2, EU sovereign debt concerns and the prospect of tightening in the emerging and developed world. These issues pose a risk to optimistic near-term margin forecasts and are likely to keep investors nervous about risk taking.

However, there are several supporting factors that are likely to continue supporting commodity prices over the medium and long term. These include continued urbanisation and industrialisation of fast-growing emerging markets, rising production costs, the ongoing global recovery with strong EM growth; a weak USD, and the potential of higher demand for commodities for inflation protection.

We believe long-term commodity prices could be significantly higher than average levels seen over the past 30 years. This is driven by the dramatic pace of sustainable operating and capital cost inflation, and shifts in the competitive landscape. China will likely continue to be structurally short of commodities, attracting higher-cost production to satisfy its rapidly growing needs. Mining companies with existing large-scale, low-cost assets will become increasingly competitive as the marginal cost of production rises.

Figure 11. Miners ranked by total expected 1-year return

Company	Unit	1-Yr target price	Current price*	1-Yr target capital return	1-Yr fwd dividend yield	Total 1-Yr return	12-month forward rolling PE	Rec. & risk
ARM	ZAR	**260**	184	41.2%	4.3%	**45.5%**	8.2x	**BUY (M)**
Anglo American	ZAR	**460**	321	43.3%	2.2%	**45.5%**	7.8x	**BUY (M)**
Assore	ZAR	**300**	216	38.8%	5.6%	**44.4%**	6.9x	**BUY (M)**
Xstrata	GBP	**18**	13	40.7%	2.0%	**42.7%**	8.3x	**BUY (M)**
Vale	USD	**42**	31	36.8%	1.7%	**38.5%**	6.2x	**BUY (M)**
Impala	ZAR	**240**	180	33.2%	3.0%	**36.2%**	12.7x	**BUY (M)**
Northam	ZAR	**56**	42	34.0%	0.3%	**34.3%**	19.1x	**BUY (M)**
BHP Billiton	GBP	**30**	23	28.8%	2.6%	**31.3%**	8.4x	**BUY (M)**
AngloGold	ZAR	**340**	280	21.5%	2.0%	**23.5%**	15.5x	**HOLD (M)**
Rio Tinto	GBP	**52**	43	20.9%	1.7%	**22.6%**	7.2x	**BUY (M)**
Aquarius	Pence	**357**	300	19.0%	2.1%	**21.1%**	14.3x	**HOLD (H)**
Lonmin	GBP	**17**	14	20.6%	0.0%	**20.6%**	11.0x	**HOLD (M)**
Exxaro	ZAR	**190**	173	10.1%	4.3%	**14.4%**	7.9x	**HOLD (M)**
Anglo Platinum	ZAR	**650**	627	3.6%	2.4%	**6.0%**	16.5x	**SELL (M)**
Gold Fields	ZAR	**95**	97	-2.5%	3.1%	**0.7%**	13.2x	**SELL (M)**
Kumba Iron Ore	ZAR	**430**	471	-8.8%	9.3%	**0.6%**	8.3x	**SELL (M)**
Harmony	ZAR	**85**	88	-2.9%	0.0%	**-2.9%**	28.6x	**SELL (M)**
Average				**22.3%**	**2.7%**	**25.0%**	**11.8x**	

Source: dataCentral * Priced as of 28 June 2011. dataCentral is CIRA's proprietary database, which includes Citi estimates, data from company reports, and feeds from Reuters, Datastream, Firstcall, IBES and Toyo Keizai.

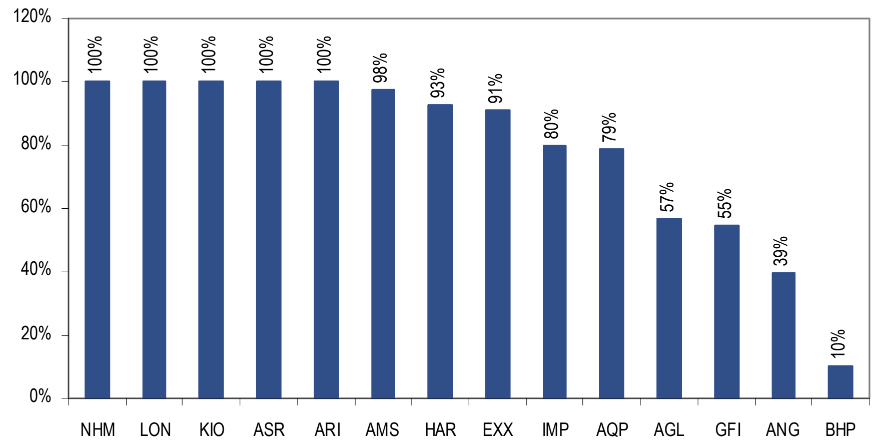
In this environment of near-term uncertainty, we prefer miners with the following characteristics: 1) large reserves, supporting long lives and expandability; 2) strong production growth; 3) margin expansion potential; 4) less gearing to a global economic slowdown; 5) potential for value unlock; 6) attractive valuation on realistic mid-cycle assumptions; 7) diversification across geographies and products; 8) sellers of non-core assets at elevated prices; and 9) corporate action targets.

By contrast, we prefer to steer clear of miners with 1) record near-term earnings forecasts with significant downside at normalised margins; 2) no improvement potential in terms of strategy and costs; 3) buyers of assets at elevated prices – we believe it's a seller's market; and 4) single commodity reliance.

Most exposed to operations in South Africa

Figure 12 shows miners' exposure to South Africa. Only five of the listed miners produce less than 80% of their revenue from sources outside South Africa.

Figure 12. Revenue produced from assets located in South Africa (FY2010)



Source: Company Reports

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

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